App. No. 10/812,476 Atty. Dkt. No. 17.003011 CON2

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

 (Currently Amended): A method of occluding the ovarian pathway of a female body, said method comprising the steps of:

providing a device comprising a catheter body defining a proximal end and a distal end, a wounding segment extending distally from the distal end of the catheter body and movable relative to the catheter body between an extended position and a retracted position, a heating element disposed on or about the wounding segment, and at least one plug housed within the wounding segment and sized and dimensioned to be implanted into a target segment within the ovarian pathway;

inserting [[a]] the catheter body <u>and wounding segment including a retractable heating</u> element in the form of a catheter mounted RF electrode array into the ovarian pathway;

applying the heating element to a target segment of the pathway, and operating the heating element to heat the target segment in the pathway;

limiting the heating of the target segment by applying power of less than of 0.1 to 5 watts to the heating element for a period of at least about 5 seconds; and

maintaining both the catheter body and at the least one plug stationary relative to the target segment while simultaneously (i) moving the wounding segment relative to the catheter body from the extended position toward the retracted position, retracting the heating element and (iii) exposing and implanting substantially simultaneously installing. [[a]] said stationary plug into within the target segment of the pathway while substantially maintaining the position of the catheter body relative to the target segment, wherein the plug comprises a foam plug having a pore size selected to encourage at least one of vascularized tissue ingrowth and vascularized capsule growth.

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2. (Currently Amended): The method of claim 1, wherein the heating element is in the form of

the catheter-mounted a RF electrode array adapted for application to the ovarian pathway.

3. (Currently Amended): The method of claim 1, wherein operating the heating element further

comprises applying RF energy to the target segment through the  $\ensuremath{\mathsf{catheter}}$  mounted RF

electrode array.

4. (Currently Amended): The method of claim 1, wherein operating the heating element further

comprises applying bi-polar RF energy to the target segment through the catheter-mounted RF

electrode array.

5 - 8. (Canceled)

9. (Previously Presented): The method of claim 1 additionally comprising the step of providing

the plug in the form of a reticulated foam plug having pores with pore sizes in the range of  $40\,$ 

to 200 microns to encourage vascularized tissue ingrowth in the foam plug.

10. (Previously Presented): The method of claim 1 additionally comprising the step of providing

the plug in the form of a reticulated foam plug having pores with pore sizes in the range of 1 to

20 microns to encourage vascularized capsule growth around the plug.

11. (Original): The method of claim 9 additionally comprising the step of providing the foam

plug in the form of silicone foam having a durometer value of 20-100 Shore A.

12. (Original): The method of claim 9 additionally comprising the step of providing the foam

plug in the form of silicone foam having a durometer value of about 60 Shore A.

13. (Original): The method of claim 9 additionally comprising the step of providing the foam

plug in the form of an ePTFE plug.

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14. (Original): The method of claim 9 additionally comprising the step of providing the foam plug in the form of an acrylic copolymer plug.

15. (Original): The method of claim 10 additionally comprising the step of providing the foam plug in the form of silicone foam having a durometer value of 20-100 Shore A.

16. (Original): The method of claim 10 additionally comprising the step of providing the foam plug in the form of silicone foam having a durometer value of about 60 Shore A.

17. (Original): The method of claim 10 additionally comprising the step of providing the foam plug in the form of an ePTFE plug.

18. (Original): The method of claim 10 additionally comprising the step of providing the foam plug in the form of an acrylic copolymer plug.

19. (Currently Amended): A method of occluding the ovarian pathway of a female body, wherein the ovarian pathway is lined by an epithelial layer on the inner surface of the ovarian pathway, and wherein the ovarian pathway is further characterized by a lamina propria layer surrounding the epithelial layer, a circular muscle layer surrounding the lamina propria layer and a longitudinal muscle layer surrounding the circular muscle layer, said method comprising the steps of:

providing a device comprising a catheter body defining a proximal end and a distal end, a wounding element including a RF electrode array extending distally from the distal end of the catheter body and movable relative to the catheter body between an extended position and a retracted position and including, and at least one plug housed within the wounding segment and defining pores selectively sized to encourage at least one of vascularized tissue ingrowth and vascularized capsule growth;

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inserting [[a]] the catheter body including a retractable and wounding element in the form of a catheter mounted RF electrode array into the ovarian pathway;

applying and operating the <del>wounding element</del> <u>electrode array</u> to cause a wound in the target segment of the pathway that necroses the epithelial layer;

limiting the outward extent of the wound to the circular muscle layer by limiting the heating of the target segment by applying power of 0.1 to 5 watts to the <del>catheter mounted</del> RF electrode array for a period of at least about 5 seconds;

maintaining both the catheter body and at the least one plug stationary relative to the target segment while simultaneously (i) moving the wounding segment relative to the catheter body from the extended position toward the retracted position retracting the wounding element and (ii) exposing and implanting substantially simultaneously installing a foam said stationary plug comprising a reticulated foam into within the wounded target segment of the pathway while substantially maintaining the position of the catheter body relative to the wounded segment, wherein the foam plug has a pore size selected to encourage at least one of vascularized tissue ingrowth and vascularized capsule growth; and

allowing the wounded <u>target</u> segment of the pathway to heal with the <del>foam</del> plug installed.

- 20. (Currently Amended): The method of claim 19, wherein the eatheter-mounted RF electrode array is adapted for application to the ovarian pathway.
- 21. (Currently Amended): The method of claim 19, wherein operating the wounding element further comprises applying RF energy to the target segment through the catheter-mounted RF electrode array.
- 22. (Currently Amended): The method of claim 19, wherein operating the wounding element further comprises applying bi-polar RF energy to the eatheter-mounted RF electrode array.

23 - 26. (Canceled)

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27. (Previously Presented): The method of claim 19 additionally comprising the step of providing the plug in the form of a reticulated foam plug having pores with pore sizes in the range of 40 to 200 microns to encouraged vascularized tissue ingrowth into the foam plug.

28. (Previously Presented): The method of claim 19 additionally comprising the step of providing the plug in the form of a reticulated foam plug having pores with pore sizes in the range of 1 to 20 microns to encourage vascularized tissue capsule growth around the foam plug.

29. (Original): The method of claim 27 additionally comprising the step of providing the foam plug in the form of silicone foam having a durometer value of 20-100 Shore A.

30. (Original): The method of claim 27 additionally comprising the step of providing the foam plug in the form of silicone foam having a durometer value of about 60 Shore A.

31. (Original): The method of claim 27 additionally comprising the step of providing the foam plug in the form of an ePTFE plug.

32. (Original): The method of claim 27 additionally comprising the step of providing the foam plug in the form of an acrylic copolymer plug.

33. (Original): The method of claim 28 additionally comprising the step of providing the foam plug in the form of silicone foam having a durometer value of 20-100 Shore A.

34. (Original): The method of claim 28 additionally comprising the step of providing the foam plug in the form of silicone foam having a durometer value of about 60 Shore A.

35. (Original): The method of claim 28 additionally comprising the step of providing the foam

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plug in the form of an ePTFE plug.

36. (Original): The method of claim 28 additionally comprising the step of providing the foam plug in the form of an acrylic copolymer plug.

37. (Currently Amended): A method of occluding the ovarian pathway of a female body, the ovarian pathway being characterized by an epithelial layer lining the inside of the ovarian pathway, a lamina propria layer surrounding the epithelial layer, a circular muscle layer surrounding the lamina propria layer and a longitudinal muscle layer surrounding the circular muscle layer, said method comprising the steps of:

providing a device comprising a catheter body defining a proximal end and a distal end, a heating element extending distally from the distal end of the catheter body and movable relative to the catheter body between an extended position and a retracted position and including, and at least one plug housed within the heating element, wherein the at least one plug is sized and dimensioned to be implanted into a target segment within the ovarian pathway and defines pores selectively sized to encourage at least one of vascularized tissue ingrowth and vascularized capsule growth;

inserting [[a]] the catheter body and including a retractable heating element in the form of a catheter mounted RF electrode array into the ovarian pathway:

applying the heating element to a target segment of the pathway, and operating the heating element to heat the target segment in the pathway;

limiting the heating of the target segment to avoid wounding the longitudinal layer by limiting the heating of the target segment by applying power of 0.1 to 5 watts to the heating element for a period of at least about 5 seconds; and

maintaining both the catheter body and at the least one plug stationary relative to the target segment while simultaneously (i) moving the heating element relative to the catheter body from the extended position toward the retracted position retracting the heating element and (ii) exposing and implanting substantially simultaneously installing a said stationary plug into within the target segment of the pathway while substantially maintaining the position of

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the catheter body relative to the target segment, wherein the plug comprises a foam plug having a pore size selected to encourage at least one of vascularized tissue ingrowth and vascularized capsule growth.

- 38. (Currently Amended): The method of claim 37, wherein the heating element includes a is in the form of the catheter-mounted RF electrode array adapted for application to the ovarian pathway.
- 39. (Currently Amended): The method of claim [[37]] <u>38</u>, wherein operating the heating element further comprises applying RF energy to the target segment through the <del>catheter-mounted</del> RF electrode array.
- 40. (Currently Amended): The method of claim [[37]] 38, wherein operating the heating element further comprises applying bi-polar RF energy to the target segment through the catheter mounted RF electrode array.
- 41 44. (Canceled)
- 45. (Previously Presented): The method of claim 37 additionally comprising the step of providing the plug in the form of a reticulated foam plug having pores with pore sizes in the range of 40 to 200 microns to allow vascularized tissue ingrowth into the foam plug.
- 46. (Previously Presented): The method of claim 37 additionally comprising the step of providing the plug in the form of a reticulated foam plug having pores with pore sizes in the range of 1 to 20 microns to allow vascularized capsule growth around the foam plug.
- 47. (Original): The method of claim 45 additionally comprising the step of providing the foam plug in the form of silicone foam having a durometer value of 20-100 Shore A.

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48. (Original): The method of claim 45 additionally comprising the step of providing the foam plug in the form of silicone foam having a durometer value of about 60 Shore A.

49. (Original): The method of claim 45 additionally comprising the step of providing the foam plug in the form of an ePTFE plug.

50. (Original): The method of claim 45 additionally comprising the step of providing the foam plug in the form of an acrylic copolymer plug.

51. (Original): The method of claim 46 additionally comprising the step of providing the foam plug in the form of silicone foam having a durometer value of 20-100 Shore A.

52. (Original): The method of claim 46 additionally comprising the step of providing the foam plug in the form of silicone foam having a durometer value of about 60 Shore A.

53. (Original): The method of claim 46 additionally comprising the step of providing the foam plug in the form of an ePTFE plug.

54. (Original): The method of claim 46 additionally comprising the step of providing the foam plug in the form of an acrylic copolymer plug.

55. (New): The method of claim 1 additionally comprising the step of limiting the heating of the target segment by applying power of less than of 0.1 to 5 watts to the heating element for a period of at least about 5 seconds.

56. (New) The method of claim 1, wherein the at least one plug defines pores selectively sized to encourage at least one of vascularized tissue ingrowth and vascularized capsule growth.